

**Remarks**

Claims 1-24 are pending with this Application. In a notice of non-compliant amendment mailed on March 19, 2009, Claim 24 was reported to be missing from a previously filed Amendment, submitted by Applicants electronically on March 10, 2009. Applicants respectfully submit another copy of the Amendment filed on March 10, 2009, which shows that Claim 24 was not missing and was on page 6 of that paper. As such, the Amendment filed electronically on March 10, 2009, was in compliance with the notice of non-compliant amendment mailed on March 19, 2009.

Nonetheless, Applicants submit a new listing of claims beginning on page 2 of this paper that will replace all prior versions and listings of claims in the Application for patent.

Applicants respectfully refer the Examiner to remarks made in the Amendment filed on March 10, 2009. For convenience, the remarks are duplicated below.

**DUPLICATION OF REMARKS PREVIOUSLY FILED ON MARCH 10, 2009:**

In the Office Action made final and mailed October 14, 2008, Claims 16 was rejected under 35 U.S.C. 112, second paragraph, for including two claim numbers. Applicants thank the Examiner for noting this and have corrected the duplication.

Claims 1-2, 6 and 8 were rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Application Publication No. 2002/0004111 (hereinafter “Matsubara”). Dependent claims, including Claims 3, 5, 8, 9, 11-15, 17-20 and 23 were rejected as being unpatentable over Matsubara in view of U.S. Patent No. 3,838,998 (hereinafter “Matthews”) or JP Publication No. 07024299 (Abstract only, hereinafter, “Seki”) and/or further in view of U.S. Patent No. 2,978,340 (hereinafter, “Veatch”) or Publication No. SU 1650196 (Abstract only; hereinafter, “Kizilshtei”) or U.S. Patent No. 4,235,753 (hereinafter, “Brown”) or U.S. Patent No. 3,888,957 (hereinafter, “Netting”).

Applicants respectfully point out that the rejections raised by the Examiner appear to be cyclical (as they had been raised before) and there are several key and continued misunderstandings with regard to the subject invention and those cited by others. Applicants respectfully note that they have to date already addressed both Matsubara and Matthews on three separate occasions with very specific details regarding how the two references do not teach the claimed invention nor is there any ability to combine the two references because they expressly teach very different spheres and processes of making very different spheres.

Applicants again point out that the teachings of Matsubara and Matthews do not overlap and their methods rely on very separate processes. The Examiner is also requested to review Applicants response mailed September 10, 2007, another response mailed October 23, 2007, which were also discussed in a telephone interview held with the Examiner on August 30, 2007. On each of these occasions, the difference processes taught by Matsubara as compared with Matthews were discussed and with some detail. Applicants remarks are reiterated below.

Matsubara uses a very different method of making particles than taught and claimed by Applicants (or as taught by Matthews). Matsubara creates glass particles from a liquid slurry of fine granulated (pulverized) particles not from an agglomerate precursor (e.g., [0035], [0050]). The liquid slurry of Matsubara consists of tiny particles , at most 3.0  $\mu\text{m}$ , preferably 2.0  $\mu\text{m}$ . Matsubara's liquid slurry includes a combustible liquid so that once sprayed, heated fine liquid droplets become tiny molten droplets that combust forming tiny glass spheres (e.g., [para. 0050]). As such, the formed spheres of Matsubara are very small, "at most 30 um" [e.g., para. 0012]. In fact, the formed spheres of Matsubara are desired to be not more than 15  $\mu\text{m}$  because otherwise Matsubara explains that the particles are not satisfactory and lose the required surface characteristics and there is deterioration of other properties as well (e.g., para. 0017]). Matsubara's glass spheres are designed to be absent of any alkali metal, stating specifically as "containing no alkali metal or substantially no alkali metal" (para. [0060]). Hence Matsubara does not prepare an agglomerate precursor, does not fire the agglomerate precursor and does not prepare microspheres having an average diameter greater than 30 microns, as is claimed by

Applicants' claimed invention. Matsubara does not teach each and every element of Applicant's claimed invention or the claimed invention on its whole. Accordingly, Matsubara cannot anticipate or be obvious over the claimed invention.

Matsubara's method of making a sphere cannot be combined with that of Matthews because the two processes are entirely different. One cannot take an individual step or composition of an entirely different method and assume it will work on another very different method without explicit evidence. The Examiner has not provided any such explicit evidence to support the suggestion of obviousness, which is required to form a *prima facie* case. Unlike Matsubara, Mathews does not prepare spheres from a fine liquid droplet nor does Matthews form particles less than 30 microns in size. Furthermore, Matthews specifically requires an alkali metal oxide content of about 20 wt. % in its feed particles (e.g., Col. 6, ll.50-56) in order to create and achieve its spheres, which are stated to have a size range of 50 to 5000 microns (e.g., Abstract; Col. 11, ll. 33-36). Matthews' spheres are formed from a high temperature and a low temperature glass former. Thus, the two teachings of Matsubara as compared with Matthews, are very different and there is no understanding of how they can be combined. The Examiner is respectfully requested to provide specific secondary evidence showing how such references can be combined to prepare Applicants' claimed invention. Applicants have shown that the teachings of Matsubara and Matthews cannot be combined nor is there any suggestion, implicit or explicit, to do so. One of skill in the art would certainly not look to either reference to arrive at Applicants' claimed invention because neither reference suggest the claimed invention, each and every element or on the invention on its whole nor is there a likely combination of the two references. Because neither Matsubara nor Matthews alone or when combined teach each and every element of Applicant's claimed invention or the claimed invention on its whole, the references are not obvious and the claimed invention is patentable. Further combinations of references with Matsubara or Matthews, including references such as Seki, Veatch, Kizilshtei, Brown or Netting, do not overcome the overarching inability to combine Matsubara and Matthews.

Attorney Docket No. 129843-1102  
Customer No. 60148

AMENDMENT AND REPLY  
Application No. 10/648,585

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Applicants respectfully request all rejections under 35 U.S.C. 112, second paragraph, and 103(a) be removed and the application be considered for allowance.

### Conclusion

Applicants respectfully submit that the Application for patent is in condition for allowance, and pursuant to a filing submitted electronically on March 10, 2009, Applicants earnestly seek allowance of the claims, as provided in the Listing of Claims, which begin on page 2 of this paper.

Should the Examiner have questions, comments, or suggestions in furtherance of the prosecution of this Application, please contact Applicants' representative at 214-999-4330. Applicants, through their representative, stand ready to conduct a telephone interview with the Examiner to review this Application if the Examiner believes that such an interview would assist in the advancement of this Application.

To the extent that any further extension fees are required, the Commissioner is hereby authorized to charge payment of any additional fees to Deposit Account No. 07-0153 of Gardere Wynne Sewell LLP and reference Attorney Docket No. 129843-1102. Please credit any overpayments to this same Deposit Account.

This is intended to be a complete response to a notice of non-compliant amendment mailed on March 19, 2009.

**Please direct all correspondence to the practitioner listed below at Customer No.  
60148.**

Respectfully submitted,

  
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Dated: April 20, 2009